

HAZARDOUS MATERIALS SPECIALIST

August 29, 2003

a. Position Description

The Hazardous Materials Specialist is responsible for performing the various hazardous materials assessments for the Task Force during incident operations. The Hazardous Materials Specialist reports directly to the HAZMAT Team Manager.

The Hazardous Materials Specialist is responsible for:

- Providing ongoing monitoring of local environmental conditions during Task Force operations;
- Providing an initial and ongoing survey for and identification of the presence of hazardous materials at search and rescue sites;
- Implementing defensive mitigation practices when indicated;
- Directing emergency decontamination procedures for any Task Force member or victim;
- Providing assistance to medical personnel for information regarding chemical exposure and injuries;
- Documenting all related information;
- Adhering to all safety procedures;
- Providing accountability, maintenance, and minor repairs for all issued equipment;
- Performing additional tasks or duties as assigned during a mission;
- Ensuring Material Safety Data Sheets (MSDS) are provided for all hazardous materials carried or used by the Task Force; and
- Ensuring all specialized equipment is maintained and calibrated according to the manufacturer's specifications.

b. Position Requirements and Criteria:

Individuals who meet the following requirements and criteria will be eligible to become Hazardous Materials Specialists in the DHS/FEMA US&R Response System. The intent of these requirements is to select personnel fully capable of providing competent assessments and advice to Task Force personnel in the urban disaster environment. The requirements and criteria for the position are identified in the following categories:

- Knowledge
- Skills
- Abilities.

Knowledge:

The Hazardous Materials Specialist must:

- Meet the requirements as a certified Hazardous Materials Technician as per OSHA Standard 29 CFR 1910.120, Hazardous Waste Operations and Emergency Response;
- Have knowledge of data collection techniques and documentation procedures in accordance with OSHA Standard 29 CFR 1910.120, Hazardous Waste Operations and Emergency Response;
- Be current in a State-sanctioned Emergency Medical Technician – Basic certification or equivalent; and
- Meet the requirements for confined space entry in accordance with OSHA Standard 29 CFR 1910.146, Confined Space Entry Permit.

Skills:

The Hazardous Materials Specialist must be:

- Proficient in recognition and identification of risks and hazards during aerial reconnaissance and document accordingly; and
- Proficient in recognition and identification of basic risks and hazards at the rescue site and document accordingly.

Abilities:

The Hazardous Materials Specialist must be able to:

- Form conclusions based on HAZMAT assessment and make recommendations for dealing with HAZMAT in assigned rescue area.

c. Operational Checklist

The purpose of this checklist is to define the duties and responsibilities of the Hazardous Materials Specialist during a mission assignment. The list is intended to be a general summary of actions. It should be understood that:

- Some required actions may not be listed, but must be identified and assumed by this position;
- Some actions may be the primary responsibility of another Task Force position, but may require assistance and coordination from this position; and
- The actions are listed in a general chronological order, but may require deviation.

(1) Upon Activation/At Task Force Assembly Point:

- Gather relevant information on general hazardous material information in the affected area; and

- Brief Task Force personnel on the general hazardous material considerations to be anticipated in the affected area.

(2) At Point of Departure:

See general operational checklist.

(3) In Transit:

See general operational checklist.

(4) Arrival at Mobilization Center:

See general operational checklist.

(5) On-Site Operations:

- Gather appropriate hazardous material information from local sources;
- Conduct a local site survey (and if possible, an aerial reconnaissance) for the general area (approximately a five mile radius). Sketch the general area and note the following:
 - ◇ Location and status of major fixed facilities and transportation lines (i.e., nuclear power facilities, hazardous waste sites, refineries, etc.);
 - ◇ Topography;
 - ◇ Prevailing weather conditions (i.e., present, 6-hour, 24-hour, and 72-hour forecasts);
 - ◇ Evidence of smoke, flame, vapor cloud, etc.; and
 - ◇ Visible structural damage to critical facilities;
- Check on the local capacity to treat possible hazardous material exposure victims;
- Ensure availability of decontamination, in the event of contact, as appropriate for any Task Force personnel or victim. This will consist of a rapid emergency decontamination to be followed by a more thorough technical decontamination if indicated;
- Assess the availability of local response capabilities to mitigate possible hazardous material situations;
- Identify issues that could require the determination of 1) conditional entry or, 2) the cessation of Task Force operations, such as damage to nuclear facilities or installations causing the migration of hazardous products toward the specific rescue area;
- Conduct a survey at specific rescue sites or other confined space areas to include:
 - ◇ Flammable atmospheres (10% of the Lower Explosive Limit);
 - ◇ Oxygen deficiencies;
 - ◇ Radiation levels;
 - ◇ Biological agents or contaminants; and

- ◇ Other specific products as indicated;
- Deny entry, unless appropriate protective action is taken, if the following conditions exist:
 - ◇ Any positive flammable gas indicator readings;
 - ◇ Oxygen levels below 19.5% or above 22.0%;
 - ◇ Any toxic material readings within 10% of its Immediately Dangerous to Life and Health (IDLH); and
 - ◇ Obvious or perceptible fumes, odors, smoke, or vapor from a confined space, or where vision is obscured within five foot levels;
- Document all events and forward to the Technical Information Specialist. The following, as a minimum, are required:
 - ◇ Site survey;
 - ◇ Site safety plan in conjunction with the Safety Officer;
 - ◇ Perimeter and entry readings;
 - ◇ Personal exposure forms; and
 - ◇ Medical surveillance records;
- Verify meter readings with a second meter and different operator, if possible. All readings will be documented according to operator and meter unit number, and will denote the findings, time and location;
- Monitor ongoing working rescue sites as necessary. Provide technical assistance to the appropriate supervisory position; and
- Keep the HAZMAT Team Manager apprised of any tactical accomplishments or conflicts, supplies deficiencies, or equipment malfunctions.

(6) Reassignment/Demobilization:

- Notify the assigned supervisor of the loss or potential maintenance requirements of any assigned tools and equipment.